



JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY

REQUEST FOR PROPOSAL

REQUEST FOR PROPOSAL NO.: MFS-269-212010

FOR:

MAVEN CRITICAL DATA PRODUCTS

PROPOSALS ARE TO BE RECEIVED AT JPL NO LATER THAN:

Date: 03/01/2010
Local Time: 3:00 p.m.

COMMUNICATIONS IN REFERENCE TO THIS RFP

It is requested that any communication in reference to this RFP be in writing and submitted electronically to the attention of:

Name: Michele F. Schneider
Title: Subcontracts Manager

Mail Stop: 190-220
Phone: 818-354-5605
Fax: 818-393-3027
E-Mail: Michele.f.schneider@jpl.nasa.gov

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ATTACHMENTS TO THE SOLICITATION. See form JPL 2839 for a list of Attachments

This Section of this RFP consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your proposal. Group B Attachments consist of forms and documents for informational purposes only. *Both A and B Attachments can be found through the electronic address identified below.* Hard copies of the Group B Attachments will be mailed by request only. Note that Group B Attachments are very important and may become requirements under the Subcontract.

World Wide Web: <http://acquisition.jpl.nasa.gov/e2000.htm>

2. JPL anticipates awarding cost type subcontracts. The following general provisions will be applied when appropriate:

[CREI \(Cost-Reimbursement without Fee with an Educational Institution\)](#)
[Cost Reimbursement with Commercial Organizations](#)

GENERAL INSTRUCTIONS

1.0 GENERAL REQUIREMENTS/INFORMATION

The effort to be performed will be in accordance with the technical requirements stated within this document; if you choose to submit more than one proposal for this effort, each proposal must be responsive to JPL's requirements, independently complete and under separate cover. JPL reserves the right to retain all proposal information submitted in response to this RFP.

This RFP does not commit JPL or the United States Government to pay any proposal preparation and related costs incurred in the submission of your proposal. JPL reserves the right to reject all proposals.

1.1 All proposals will be submitted electronically via email to Michele.f.schneider@jpl.nasa.gov

1.2 Data

If the proposal contains data that is not to be disclosed for any purpose other than for proposal evaluation, you must place on the cover sheet of each proposal volume the following wording:

"Data contained in pages _____ of this proposal furnished in connection with RFP No. MFS-269-212010 shall not be used or disclosed, except for evaluation purposes, provided that if a subcontract is awarded to this offeror as a result of or in connection with the submission of this proposal, JPL and the Government shall have the right to use or disclose this data to the extent provided in the subcontract. This restriction does not limit JPL's right to use or disclose any data obtained from another source without restriction."

1.3 Requests for Clarification/RFP Addenda

During the proposal preparation period, all requests for clarification and/or additional information, must be submitted in writing or by e-mail to the individual referenced by "Attention:" on the RFP cover page. When appropriate, responses to requests, as well as any JPL initiated changes, will be provided to all prospective proposers as addenda to the RFP.

1.4 Compliance With Export Control Laws and Regulations

In the performance of this RFP, JPL may exchange information or other technology which may be subject to the export control laws and regulations of the United States, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. 120-130 and the Export Administration Act Regulations (EAR), 15 C.F.R. 730-774). All proposing parties agree to fully comply with all such laws and regulations in the performance of this RFP.

2.0 LATE PROPOSALS

Any proposal, portion of a proposal, or unrequested proposal revision received at JPL after the time and date specified on the cover page of this RFP will cause the entire proposal to be late. Late proposals will not be considered for award, except under any of the following circumstances:

- 2.1 JPL determines that the proposal was late due solely to mishandling by JPL after receipt at JPL, provided that the timely receipt at JPL is evidenced.
- 2.2 No acceptable proposal(s) are received as of the proposal due date(s) and time.

NOTE: If an emergency or unanticipated event interrupts normal JPL processes so that solicitation responses cannot be received by the JPL office designated for receipt by the exact time specified in the solicitation, and urgent JPL requirements preclude amendment of the solicitation closing date, the time specified for receipt of proposals will be extended to the same time of day specified in the solicitation on the first work day on which normal JPL processes resume.

3.0 SOURCE EVALUATION AND SELECTION PROCESS

The basis of source selection is predicated on the following (JPL, at its discretion, may waive minor informalities and minor irregularities in proposals received.):

- 3.1 Proposals will be evaluated in the areas of technical and management as described in the Technical/Management Proposal Instructions of the RFP. Although cost/price will not be scored, the proposed cost/price is a substantial factor in source selection but is approximately equal in importance to the combined technical and management areas. Source selection will be based on the responsive, responsible (within the meaning of Federal Acquisition Regulation 9.1) offeror whose proposal is determined to represent the best value to JPL. The closer the proposers are in the qualitative (evaluated) technical and/or management areas, the more important cost/price can become. JPL may select for negotiations a source whose qualitative merits are lower but whose lower cost/price is commensurate with providing the best overall "value." Conversely, a source may be selected whose cost/price is higher, but their higher qualitative merits are commensurate with providing best overall "value." The proposal evaluation process is as follows:
 - 3.1.1 Proposals are evaluated against the pre-set areas of evaluation outlined in the Technical/Management Proposal Instructions of the RFP. An analysis of the cost/price details (if applicable) is performed and proposed costs/prices are compared.
 - 3.1.2 Cost/price proposals are reviewed for mathematical accuracy, rate application, price omissions, and price reasonableness. If the Buy American Act or rent-free use of Government-furnished property applies, the cost/price will be adjusted as required for the purpose of evaluation.
 - 3.1.3 JPL may, at its discretion, conduct limited communications with one or more proposer(s) for the purpose of determining whether

the proposer(s) should be included in the competitive range. Such pre-competitive range communications may be conducted to enhance JPL understanding of proposal(s) and may be used to: (i) validate the proposed cost/price; (ii) to clarify omissions, ambiguities and uncertainties in the proposal's supplemental business/cost information; and to clarify relevant past performance information. Proposers not considered within the competitive range are eliminated from further consideration and are so notified.

- 3.1.4 JPL may make source selection after the initial proposal evaluation or may conduct discussions with the proposers determined to be within the competitive range. The purpose of the discussions is to assist the evaluators in fully understanding each proposal by verifying strengths and weaknesses, discussing any omissions and ambiguities, verifying the validity of the proposed cost/price, assessing the proposed personnel and examining the proposer's capabilities for performing the work. JPL may also request cost/price proposal deltas in order to correct errors, omissions, or ambiguities in the proposal. NOTE: Only those cost/price deltas specifically requested by JPL will be accepted.
- 3.1.5 For proposals on cost type subcontracts, JPL's final evaluation may include completing a thorough assessment of the cost realism of each cost estimate and comparing the cost estimates. In performing this assessment, JPL may develop a "probable cost" for each proposer. "Probable cost" is defined as JPL's best estimate of the cost of any contract that is most likely to result from the offeror's proposal.
- 3.1.6 Upon completion of the initial evaluation findings, any discussions, and any cost/price delta(s), a final evaluation is conducted resulting in the selection of a Subcontractor(s) for negotiations. In performing its cost assessment related to proposals for cost reimbursement subcontract (but typically not for fixed priced), JPL may develop a "probable cost" for each proposer, which is JPL's best estimate of the cost of any contract that is most likely to result from the offeror's proposal (Note: JPL reserves the right to reject all proposals).

4.0 EXCEPTIONS TO THE GENERAL PROVISIONS (GPS) AND/OR ADDITIONAL GENERAL PROVISIONS (AGPS)

- 4.1 No exceptions allowed: JPL has made the determination that ANY exceptions to JPL's General Provisions and/or Additional General Provisions will render your proposal unacceptable.

TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS

Present and organize your proposal in accordance with the following:

1.0 MANDATORY QUALIFICATION(s)

1.1 There are no Mandatory Qualification Criteria for this RFP.

2.0 TECHNICAL/MANAGEMENT PROPOSAL INSTRUCTIONS

INTRODUCTORY INSTRUCTIONS

JPL will evaluate Volume I of your proposal based on the information asked for in the below "INSTRUCTIONS," in respect to the degree to which your proposal meets the requirements/needs of the Specimen Subcontract. The degree to which the requirements/needs are met may include any number of considerations, such as the suitability of the various areas of the technical/management approach(es), the level of understanding of the requirements, the extent of insight into the technical/management challenges and their solution(s), the effectiveness of management structure, the relevancy of corporate and/or personnel experience, etc., as is appropriate for each area of evaluation.

TECHNICAL/MANAGEMENT CRITERIA AND FACTORS

Any factors listed below under the criteria are not weighted for evaluation and are not listed in any order of importance.

VOLUME I - TECHNICAL/MANAGEMENT EVALUATION CRITERIA AND ORGANIZATION				
TECHNICAL/MANAGEMENT CRITERIA AND THEIR WEIGHTING		PROPOSAL ORGANIZATION		
Criteria	Weighting	No. of Copies	Maximum Page Limit: 3	
			Recommended	Required
T - TECHNICAL CRITERIA	60%			

<ul style="list-style-type: none"> • T1. Responsiveness to the requirements. <ul style="list-style-type: none"> A. Meets the technical requirements of the specific task. B. Distribution readiness of the products. 	40%	
<ul style="list-style-type: none"> • T2. Qualifications of proposing team. <ul style="list-style-type: none"> A. Familiarity with the instruments from which the data is obtained. B. Familiarity with the uses to which the products are applied. C. Familiarity with Mars and its characteristics D. Experience producing data sets of the type proposed. 	20%	
M – MANAGEMENT CRITERIA	40%	
<ul style="list-style-type: none"> • M1. Delivery schedule for product distribution. <ul style="list-style-type: none"> A Plan to meet delivery dates • M2. Structure of proposing team. <ul style="list-style-type: none"> A Number and qualifications of students, post-docs, and other team members (participants of investigators new to the Mars Program are strongly encouraged). B. Distribution of labor. 	30% 10%	
Total Score Possible:	100%	
<p>*If “Page Limit” is checked: Any required page limitations included in an RFP shall be <u>strictly</u> enforced. A page is each face of a piece of paper containing substantive, evaluatable information; page size: 8 ½” x 11”; any drawings/photos are included (foldouts will be considered 2 or more pages); single spacing minimum; font size not less than 10; all margins ½” or greater. If “Required” page limit, no pages beyond the number specified will be evaluated. Unless requested, mockups, models, samples, hardware, or software of any kind must not be furnished and will not be considered.</p>		

3.0 MAVEN CRITICAL DATA PRODUCTS NEEDS

Characterize the 3-D Mars thermospheric structure in the lower atmosphere (<200 km) extending from the exobase downward to the vicinity of its homopause (~115-150 km) to flag regions of potentially extreme atmospheric perturbations and for support of five specific “deep dip” campaigns down to ~125 km during the 1-year MAVEN mission:

- A. Simulate the 3-D neutral temperature, composition (including mass densities), and horizontal (zonal and meridional) wind structure, along with potentially extreme orbit-to-orbit variations.
 - Determine variations of these parameters over a range of solar activity (at least F10.7 from 130 to 200) and all Mars seasons.
 - Determine variations of these parameters over regions of the lower atmosphere containing different horizontal dust distributions (e.g., including variations measured by TES or THEMIS, or modeled variations based on TES or THEMIS inputs).
- B. Provide tabular and plotted outputs of these parameters (and their variations) for the locations (latitude, season, local solar time, and possible dependence on longitude) of the five specific MAVEN “deep dip” campaigns.
- C. Model atmosphere response at MAVEN’s periapsis altitudes in response to solar flares, Co-rotating Interaction Regions (CIRs), Coronal Mass Ejections (CMEs), and dust storm perturbations to the atmosphere that might be anticipated during the mission.

3.1 MAVEN CRITICAL DATA PRODUCTS SCHEDULE

The MAVEN CDP task is expected to run from May of 2010 to May of 2012. Awarded investigators should expect to participate in the following:

Kickoff teleconference with the MAVEN Project May 2010

Monthly teleconferences with the MAVEN Project.

Semi-annual reviews with the Project Scientist (see below).

Annual report to the Project and Mars Program (see below). May 1, 2011

Final report and data delivery to the MAVEN Project and the Mars Program May 1, 2012

4.0 REPORTING REQUIREMENTS

- A. Participate in semi-annual teleconferences with Project Scientist(s) of the customer project(s) to review the status of the investigation and to insure

that the work being performed meets the customer's expectations and current requirements.

- B. Provide a brief (2-4 page) progress report annually to the Mars Program Office. The report shall include a quad chart containing s a summary of research activities and finding to date, a bibliography of papers submitted, and descriptions of derived data products to be delivered to the Planetary Data System (PDS) and a figure that illustrates the investigation of results obtained.
- C. Provide a Final Report to the Mars Exploration Program Office, along with abstracts of papers submitted and descriptions of derived data products to the PDS.

COST INSTRUCTIONS

This portion of the proposal instructions outlines the requirements to be followed in preparing the cost proposal.

1.0 DATA SUBMITTAL

Provide the applicable data requested in paragraphs 1.1 and 1.2, below. Note that if any of the current information requested below has been previously submitted to JPL, resubmittal is not necessary; simply reference the applicable JPL RFQ or RFP number under which the data was submitted.

- 1.1 Provide the cost breakdown information requested on Attachment A-19, "Cost Elements Breakdown (Short Form)." Proposers may provide the requested information, as applicable, on an alternate computer generated form.
- 1.2 You are required to provide the following information subsequent to the submission of your proposal, if requested by the JPL Subcontract Manager. This information must be received by JPL within (*) working days from the date of the request for the information to be further considered. Failure to provide this information in a timely manner may result in the elimination of the proposal from further consideration.
 - 1.2.1 For proposals greater than \$500,000, a Subcontract Pricing Proposal Cover Sheet, signed by the proposer's authorized representative, stating.
 - 1.2.1.1 The solicitation number, proposed cost, profit or fee, and total;
 - 1.2.1.2 Whether your organization is subject to cost accounting standards (CAS);
 - 1.2.1.3 Whether your organization has submitted a CASB Disclosure Statement, and if it has been determined adequate;
 - 1.2.1.4 Whether you have been notified that you are or may be in noncompliance with your Disclosure Statement or CAS, and, if yes, an explanation;
 - 1.2.1.5 Whether any aspect of this proposal is inconsistent with your disclosed practices or applicable CAS, and, if so, an explanation; and
 - 1.2.1.6 Whether the proposal is consistent with your established estimating and accounting principles and procedures and FAR Part 31, "Cost Principles," and, if not, an explanation.

- 1.2.2 If your proposal exceeds \$650,000, the cost or pricing data requested below must be certified in accordance with Attachment B-10, "Certificate of Current Cost or Pricing Data," upon subcontract negotiation, unless an exception applies. If any exception per Attachment B-13, "Claims for Exceptions to Cost or Pricing Data," is applicable, you must submit a written request in accordance with Attachment B-13 to qualify for an exception to the requirement for submission of cost or pricing data.
- 1.2.3 For each individual item included in the proposal for which the price exceeds \$650,000 and is based on catalog or market prices, or prices set by law or regulation, a written request for an exception to the submission of certified cost or pricing data in accordance with Attachment B-13, "Claims for Exceptions to Cost or Pricing Data," is required. If an item is subject to an exception but is priced at less than or equal to \$650,000, state the basis of the price and provide appropriate reference documentation; a written request for an exception is not required.
- 1.2.4 A letter authorizing the release of rate and other relevant information to the Jet Propulsion Laboratory.

2.0 SUPPLEMENTAL BUSINESS/COST INFORMATION

2.1 Financial Statement.

Submit a copy of your annual financial statements for the last three years and any information regarding additional resources required to perform the proposed effort, such as an established line of credit or other financial resource.

2.2 Royalties.

If your proposal contains costs for royalties, indicate the amount and be ready to furnish details.

2.3 Accounting Calendar.

The proposer will furnish its accounting calendar for each year in which work is anticipated.

2.4 Attachments

The Section of this RFP entitled "Attachments" consists of those forms and documents containing information applicable to this RFP. Group A Attachments must be completed and attached to your cost proposal. Group B Attachments consist of forms and documents for informational purposes only and can be accessed via the electronic address provided below. Hard copies of the Group B Attachments will be mailed by request only. Note that the Group B Attachments are very important and may be required under the Subcontract.



ATTACHMENTS TO THE SOLICITATION

The following attached forms and documents are organized into two major groupings:

1. Group A must be completed and returned as part of your quotation or proposal.
2. Group B are for information purposes only in preparing your quotation/proposal.

NOTE TO PROPOSERS: Forms and documents listed below are not applicable unless the box preceding the Attachment Number is marked ☒. See: <http://acquisition.jpl.nasa.gov/groupb.htm>

GROUP A - Complete and return as part of your quotation/cost proposal, as applicable:

Attachment	Title and Form Number
<input checked="" type="checkbox"/> A-1	Acknowledgment (form JPL 2384)
<input checked="" type="checkbox"/> A-2	Cost Accounting Standards (form JPL 2842)
<input type="checkbox"/> A-3	Government Property Questionnaire (form JPL 0544)
<input type="checkbox"/> A-4	Acknowledgment - Commercial Items or Services (form JPL 2384-1)
<input checked="" type="checkbox"/> A-5	Acknowledgment - CREI Contract (form JPL 2384-3)
<input type="checkbox"/> A-6	Notice of Total Small Business Set-Aside (form JPL 4022)
<input type="checkbox"/> A-7	Notice of Total Small Business Set-Aside - Modified (form JPL 4023)
<input type="checkbox"/> A-8	Acknowledgment – RSA Subcontract (form JPL 2384-8)
<input type="checkbox"/> A-9	(RESERVED)
<input type="checkbox"/> A-10	(RESERVED)
<input type="checkbox"/> A-11	(RESERVED)
<input type="checkbox"/> A-12	(RESERVED)
<input type="checkbox"/> A-13	(RESERVED)
<input type="checkbox"/> A-14	Past Performance (form JPL 0358)
<input type="checkbox"/> A-15	Cost Element Breakdown (form JPL 0549)
<input type="checkbox"/> A-16	Determination of Lowest Overall Price - Time-and-Material Proposals (form JPL 0359)
<input type="checkbox"/> A-17	Determination of Lowest Overall Price - Labor Hour Proposals (form JPL 0363)
<input type="checkbox"/> A-18	Determination of Lowest Overall Price - Labor-Hour Proposals to JPL-Provided Rate Ranges (form JPL 0364)
<input checked="" type="checkbox"/> A-19	Cost Elements Breakdown (Short Form) (form JPL 0549-1)

GROUP B - For information only:

Attachment	Title and Form Number
<input checked="" type="checkbox"/> B-1	Waiver of Rights to Inventions (form JPL 62-301)
<input type="checkbox"/> B-2	Summary Work Breakdown Structure (no form number)
<input type="checkbox"/> B-3	Notice to Offerors (form JPL 2843)
<input type="checkbox"/> B-4	Instructions for Patent Agreement for Use in Support Service Contracts (form JPL 2844) Patent Agreement (form JPL 1929)
<input type="checkbox"/> B-5	Notice of Requirement of Pre-award On Site Equal Opportunity Compliance Review (form JPL 3553)
<input type="checkbox"/> B-6	Requirements for A Subcontracting Plan (form JPL 0294)
<input type="checkbox"/> B-7	Security Requirements for a Classified Contract (form JPL 2891)
<input type="checkbox"/> B-8	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity(Executive Order 11246) (form JPL 2899)
<input type="checkbox"/> B-9.1	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities (form JPL 2896)
<input type="checkbox"/> B-9.2	Notice to Prospective Contractors of Requirement for an Environmental Audit of the Lease Facilities – Alternate (form JPL 2896-1)
<input type="checkbox"/> B-10	Certificate of Current Cost or Pricing Data (form JPL 2496)
<input type="checkbox"/> B-11	Standards of Conduct and Procedures for Handling Contractor Personnel Problems, Discipline,

- and Separation (form JPL 4412)
- ☐ B-12 (RESERVED)
 - ☐ B-13 Claims for Exceptions to Cost or Pricing Data (form JPL 2703)
 - ☐ B-14 (RESERVED)
 - ☐ B-15 (RESERVED)
 - ☐ B-16 (RESERVED)
 - ☐ B-17 JPL Contractor Safety and Health Notification (form JPL 2885)
 - ☐ B-18 (RESERVED)
 - ☐ B-19 Additional General Provisions – Safety and Health (If applicable, plans required before award)